ADOT CONDA NO 80-0247

A.G. CONTRACT NO. 0978

INTERGOVERNMENTAL AGREEMENT

ARIZONA TRANSPORTATION RESEARCH CENTERILED WITH SECRE

AT ARIZONA STATE UNIVERSITY

Date Filed.

This agreement is entered into by and between the ARIZONA BOARD OF REGENTS, acting for ARIZONA STATE UNIVERSITY, under the authority of A.R.S. 15-724 and 15-725 hereinafter sometimes referred to as UNIVERSITY, and the ARIZONA DEPARTMENT OF TRANSPORTATION under authority of A.R.S. 28-108, hereinafter referred to as ADOT.

### WITNESSETH:

WHEREAS, ADOT and UNIVERSITY have collaborated on the development of a plan to establish a transportation research center on the campus of UNIVERSITY for purposes of enhancing the capabilities of ADOT in the area of transportation related research, and

WHEREAS, it has been determined by UNIVERSITY that the location of such a center on the campus would provide opportunities for the faculty and students to participate in transportation research and thereby gain important knowledge and experience,

NOW THEREFORE, the parties hereto agree as follows: ARTICLE I - ARIZONA TRANSPORTATION RESEARCH CENTER CREATED: The ARIZONA TRANSPORTATION RESEARCH CENTER, sometimes referred to as ATRC, is hereby created by the parties as an organization which shall exist by virtue of the terms and conditions of this Agreement.

ARTICLE II - STATEMENT OF PHILOSOPHY AND PURPOSE: It is recognized that research is essential to the mission of ADOT as a public agency of Arizona charged with responsibilities for providing efficient and safe transportation within the State. It is also recognized that transportation research is an

important element in several fields and disciplines within the graduate education and research programs of UNIVERSITY. In consideration of these tenets the parties to this Agreement join together for the purpose of sharing, developing, and encouraging research programs and projects for the furtherance of research in the general field of transportation.

ARTICLE III - NATURE OF RESEARCH: The Arizona Transportation Research Center will direct its efforts primarily to applied research, technology transfer, and trouble shooting as related to Arizona's conditions. A major commitment will be to create a research organization which is responsive to the needs of ADOT. Research will be directed toward the traditional fields of materials research, but also will be vitally concerned with the broad spectrum of transportation research and development problems in the areas of safety, economics, environment, and planning.

A. Applied Versus Theoretical. The word 'Research' has a wide range of meanings. Typically, Departments of Transportation consider research to be "good" when results are positive and improve the operation of the Department.

Results of research from other organizations can be adapted for local conditions and be considered as an extremely worthwhile and valid effort. By contrast, faculty members often visualize research as an effort which increases knowledge as evidenced by acceptance of their results for publication in referred journals. Certainly, the preponderance of research conducted by the Arizona Transportation Research Center should be directed toward the solution of practical problems, and toward the necessary transfer of knowledge to assure the implementation by appropriate Divisions within ADOT.

Certain aspects of the efforts of the Arizona Transportation Research

Center, however, should be visionary and, ideally, solutions should anticipate

emerging problems. As an example, work related to conservation of energy only

a few years ago would certainly have been considered as visionary. With changing

circumstances, however, research directed towards conservation of energy is a highly viable topic with extremely practical ramifications. Therefore, approximately 5% to 10% of each annual budget should be set aside for research concerned with emerging problems.

B. <u>Keeping Research Pertinent</u>. Research will be maintained as a vital and effective force by insuring that the technical staff of the Arizona Transportation Research Center, and the various faculty members who work with them, interact in one-to-one contact with their counterparts in the ATRC. In addition, the research staff will make visits to the field with respect to areas of their expertise on a timely and continuing basis.

ARTICLE IV - ORGANIZATION, MANAGEMENT, AND PERSONNEL OF ATRC. It is understood and agreed that although housed on a campus of UNIVERSITY, the ATRC is an arm of ADOT to be organized, managed, staffed, and operated as provided for in this Agreement.

- A. <u>Organizational Chart</u>. The ATRC Organization Chart, depicting the general organizational pattern of ATRC is attached hereto and made a part of this Agreement as EXHIBIT A. Changes to this Organizational Chart must be mutually acceptable to the parties and shall not become effective until the changes are covered by an appropriate modification of the Agreement signed by both parties.
- B. <u>Policy Committee</u>. The Policy Committee of the ATRC shall consist of the Director of the Arizona Transportation Research Center, ADOT Assistant Director and State Highway Engineer, ADOT Assistant Director for Transportation Planning, the Dean of the College of Engineering and Applied Sciences, and the Chairman of the Department of Civil Engineering.

The Policy committee will meet twice a year to consider overall objectives and effectiveness of the Arizona Transportation Research Center.

C. Advisory Council. The Advisory Council shall consist of the

Director of the Arizona Department of Transportation or his designated representative, three ADOT Department Heads, three selected ASU faculty members, a representative of the Federal Highway Administration, and be chaired by the Director of the Arizona Transportation Research Center.

The Council evaluates proposed research and assists the Director in establishing priorities on projects with respect to available funds. In addition, the Council evaluates research progress and usefulness. It also helps implement technology transfer to the operating departments of ADOT by initiating workshops, short courses, research reports and manuals of practice.

- D. Advisory Committees. Advisory Committees will be formed for pertinent areas of research. Each of these Advisory Committees will be composed of at least one member from the full-time professional staff of the Arizona Transportation Research Center, at least two members from the entities related to the specific research from ADOT proper, and at least one faculty member from Arizona State University.
- E. <u>Permanent Staff of ATRC</u>. ADOT agrees to exercise care in the selection of the permanent staff of ATRC, and to choose qualified personnel on the basis of education, ability, and characteristics that will lead to significant contributions towards the stated purposes, goals and objectives of ATRC. To the extent permissible under state merit system statutes, ADOT also agrees to attempt to implement such measures as may be necessary to provide adequate incentives and opportunities for the staff of ATRC to advance within the ADOT structure to include the dual-ladder personnel advancement concepts.
- 1. <u>Director</u>: ADOT shall select and appoint a Director for the Center under state merit system selection procedures. A copy of the Director's position description shall be furnished to UNIVERSITY at the time the position is established to the extent permissible under merit system statutes, such appointment or change in appointment shall be coordinated with and shall be mutually acceptable to both ADOT and UNIVERSITY. The

Director shall report directly to the Director of ADOT or his designated representative. The Director shall be considered to be the official contact between UNIVERSITY and ADOT as the authorized representative of ADOT for purposes of the administration of the terms and conditions of this Agreement.

### 2. Professional Staff:

- a. Qualifications: Qualifications for the permanent staff of the ATRC, excluding permanent professional staff of the ADOT Research Section existing prior to the effective date of this Agreement shall be established under the state merit systems. It is the objective of the program that permanent professional employees shall have at least a Master's degree and at least 25% of the permanent professional staff shall have earned the Ph.D. degree. For engineers, registration shall be required.
- b. <u>Faculty Status at UNIVERSITY</u>: Permanent professional personnel shall be accorded the privileges of full time Faculty Research Associates of UNIVERSITY as permitted by the regulations of UNIVERSITY.
- 3. <u>Support Staff</u>: The permanent support staff shall be accorded the privileges of full time staff members of UNIVERSITY as permitted by the regulations of UNIVERSITY.
- F. Professional and Student Personnel Rotating Position Program. To the extent permissible under the state merit system to help maintain viability and practicality in the Arizona Transportation Research Center, and to enhance effectiveness throughout ADOT, ADOT agrees to adopt a plan of detail to special duty and educational training whereby personnel from selected jobs throughout ADOT will be rotated through ATRC for periods of one to two years, more or less. During this assignment, such personnel will spend half of their time on research projects and half of their time doing graduate work towards a Master's or Doctorate degrees, as appropriate. The objectives of special

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scales of the applicable UNIVERSITY Department. The selection and assignment of students shall be accomplished as a cooperative process between the Director of ATRC and the UNIVERSITY's representative appointed hereunder.

- 1. <u>Status</u>: Students assigned to ATRC under this Agreement shall be accorded the privileges of students of the same level (graduate or undergraduate) as permitted by the rules of UNIVERSITY for student employees of the UNIVERSITY.
- 2. <u>Number of Participants</u>: A minimum of one graduate student assistantship for one half-time for the academic year will be funded for each two full-time professional personnel of the ATRC. Usually these students will be employed full time during the summer months.
- ARTICLE V ATRC RESEARCH OPERATIONS: This Agreement anticipates that the goals and objectives of ATRC will be accomplished through the implementation of intramural and extramural programs and projects. The nature of these programs and projects will be as designed and developed by the ATRC organizational and management structure as provided in ARTICLE IV.
- A. <u>Intramural Programs and Projects</u>: It is understood that ATRC may initiate "in-house" programs and projects wherein the work itself is performed by the staff of ATRC with or without outside contract or grant assistance to achieve program goals and objectives as established by ATRC. Funding for such activities would be provided directly by ADOT from whatever sources may be available to ADOT except those arising from contract performance as described in B. below.
- B. Extramural Programs and Projects: It is understood that ATRC may undertake programs and projects to achieve goals and objectives established by outside organizations using ATRC personnel, consultants, and facilities as provided for hereinunder. Such activities may include contract or grant research operations entered into by ADOT acting through ATRC as the prime contractor or grantee. Assistance for professional or other services, as

well as other contract or grant requirements, may be obtained through subcontracts or subgrants issued by and administered by ADOT. All such programs and projects undertaken by ATRC must be in harmony with the purposes to the ATRC as stated in this Agreement.

# ARTICLE VI - UNIVERSITY SERVICES:

- A. <u>Professional Personnel Services Support</u>: In order to maintain a mutually acceptable level of involvement of the UNIVERSITY in the research operations of ATRC, ADOT agrees to provide support for the services of the faculty, and other professionals of UNIVERSITY as may be needed, which shall represent the equivalency of at least 7% of the cost of the full time faculty of UNIVERSITY's Department of Civil Engineering as authorized by the approved budget for UNIVERSITY for the applicable fiscal year, provided, however, that no commitment exists for such support to exceed the equivalent of 20% of the cost of the permanent professional staff of ATRC authorized by the approved budget for ATRC for the applicable fiscal year. Funding for the costs of the time of the faculty members and other professionals of UNIVERSITY shall be computed on the basis of reimbursements to UNIVERSITY under the terms of the Agreements covered in paragrphs B. and C. hereinunder.
  - B. <u>Professional Personnel Assignment Agreements</u>: Under conditions whereby ATRC desires to obtain the services of an individual faculty member or other professional staff member of UNIVERSITY to assist the Center's staff in its research operations, a Professional Personnel Assignment Agreement form developed mutually by authorized representatives of ATRC and UNIVERSITY,

and approved by University officials, shall be utilized. It is understood that such agreements intended to cover the assignment of individuals to the ATRC for a specified time to apply expertise in an area of research to be specified, and that as such the Professional Personnel Assignment Agreements shall be considered a part of this agreement.

- may wish to contract with UNIVERSITY under which UNIVERSITY shall undertake a commitment to provide certain research services or otherwise perform on a non-personal services basis in support of the operations of ATRC. Such agreements could take the form of prime or subcontracts or purchase orders and are distinguished from the Professional Personnel Assignment agreements, as provided for in the above, in that the research agreements call for UNIVERSITY to perform studies or provide other non-personal services as an independent contractor to achieve objectives specified in the contract work statement. It is agreed that such contracts negotiated and entered into by reason of the existence of this Agreement shall not be considered Intergovernmental Agency Agreements subject to the Provisions of A.R.S. 11-952.
- D. <u>Logistical Support</u>: UNIVERSITY agrees to provide supporting services, in addition to those services provided for in ARTICLE VI, for ATRC on a reimburseable basis and within the limitations as described below:
- 1. <u>Purchasing</u>: UNIVERSITY may provide purchasing services for such material as may be necessary for the operation and maintenance of ATRC as may be authorized by ADOT and provided that the standing operational controls and procedures of UNIVERSITY are utilized and that UNIVERSITY requisitions are signed by the Director of ATRC and approved by the UNIVERSITY Representative designated in Article IX. The Director of ATRC may make such purchases as are necessary through normal ADOT purchasing procedures.

- 2. <u>Physical Plant Services</u>: UNIVERSITY will provide such physical plant maintenance services to the ATRC as are provided for other units of UNIVERSITY located on campus. Requests for services shall be submitted in the manner required by the Director of the UNIVERSITY Physical Plant and approved by the UNIVERSITY Representative designated in Article VIII.
- 3. <u>Personnel and Payroll</u>: UNIVERSITY will provide personnel and payroll services for faculty and student personnel assigned to ATRC under the terms of this agreement. Appropriate UNIVERSITY Payroll Action Requests shall be used for the assignment or change in assignment of such personnel and must be approved by the UNIVERSITY Representative designated in Article VIII, as well as by all other appropriate UNIVERSITY officials.
- 4. Excluded: It is understood and agreed that UNIVERSITY will not provide accounting support for intramural and extramural services for which ADOT is a prime contractor or grantee. UNIVERSITY will, however, provide auditable records for those services furnished the ATRC under Professional Personnel Assignment Agreements and Research Agreements with UNIVERSITY as provided for in ARTICLE VI B. and C. herein.

### E. Facilities and Equipment:

1. Space: UNIVERSITY agrees to provide a maximum of 3,457 square feet of space allocated to the College of Engineering and Applied Sciences in Wing B, Rooms 234, 236, 240, 242 and 246 of the Physical Sciences Building. UNIVERSITY agrees to provide the space on a no charge basis subject to the provision for minimum indirect cost recovery as stipulated in Article VII hereinafter. It is fully understood and agreed that occupancy of said space by ATRC and any additional space assigned to ATRC under this Agreement is subject to the availability of the space after the primary space requirements of UNIVERSITY are considered, and that UNIVERSITY has the right to reassign space as may be necessary in consideration of existing or future requirements

by the UNIVERSITY as may be determined by the Administration of UNIVERSITY.

# 2. Permanent and/or Capital Equipment:

- a. <u>ATRC Acquired Equipment</u>: It is agreed that ADOT may install or otherwise locate ADOT owned equipment in the space allocated by UNIVERSITY under this Agreement. Such authorization shall be subject to the appropriate UNIVERSITY approvals and rules and regulations concerning installation, safety, supervision, removal and restoration of facilities and space.
- b. <u>UNIVERSITY owned</u>: It is agreed that subject to applicable UNIVERSITY approvals and controls, UNIVERSITY owned equipment may be located in the ATRC space allocated under this Agreement.
- C. <u>UNIVERSITY owned Equipment not Located in ATRC Space:</u>
  Subject to the joint use provisions hereinafter stated, and to all other prior approval requirements of UNIVERSITY, as may be imposed at the time of usage,
  ATRC personnel shall be allowed to use UNIVERSITY owned equipment not located in the space allocated under this Agreement.
- d. <u>Joint Use</u>: The personnel of ATRC and their consultants; and the personnel of UNIVERSITY, including students and consultants, shall be allowed access and usage of each other's equipment on the basis of availability after consideration of each other's primary needs, and subject to the approval of the appropriate representatives of ATRC or UNIVERSITY.
- e. <u>Responsibility</u>: To the extent authorized by law ADOT assumes all responsibility for loss, damage, care and safe use of all UNIVERSITY and ADOT owned equipment physically located in the space allocated under this Agreement; ADOT further assumes all responsibility for loss, damage, care, safe use, and any liability arising out of the physical presence and use of ADOT property located on the campus of UNIVERSITY by reason of this Agreement.

f. <u>Insurance</u>: It shall be the responsibility of ADOT to maintain adequate insurance coverage for loss and liability for ADOT property located on the campus of UNIVERSITY under the terms of and by reason of this Agreement.

ARTICLE VII - <u>REIMBURSEABLE COSTS AND PAYMENTS</u>: UNIVERSITY shall be reimbursed for the actual costs incurred by reason of this Agreement as provided below:

## A. Professional Personnel Assignment Agreements:

- l. <u>Direct Costs</u>: The costs of the salaries of the individuals involved on the established salary rate for the individual as an employee of UNIVERSITY plus associated payroll expense, as provided for in the particular agreement concerned.
- 2. <u>Indirect Costs</u>: In accordance with the rates established for Research Agreements in paragraph B. below.

### B. Research Agreements:

- 1. <u>Direct Costs</u>: All allowable direct costs as provided for under the terms and conditions of the agreement concerned.
  - 2. <u>Indirect Costs</u>: In accordance with the following table:

# Source of Funds:

a. State Appropriations, State Tax Funds, and all other State of Arizona funds.

### Rate:

a. 50% of the Indirect Cost Rate established for Arizona State University under Agreement with the cognizant federal government audit agency for the applicable period of the research agreement involved, except that lower rates may be accepted by UNIVERSITY when justified by the conditions involved. The establishment of lower rates shall be mutually negotiated by the authorized representative for ATRC and UNIVERSITY subject to the discretion of the UNIVERSITY officials concerned with approving Indirect Costs rates.

b. Other

- b. Full Indirect Cost Rate as established for Arizona State University under Agreement with the cognizant federal government audit agency for the applicable period of the research agreement involved, except that lower rates may be accepted by UNIVERSITY when justified by the conditions involved. The establishment of lower rates shall be mutually negotiated by the authorized representative for ATRC and UNIVERSITY subject to the discretion of the UNIVERSITY officials concerned with approving Indirect Costs rates.
- C. <u>Logistical Support Services</u>: UNIVERSITY shall be reimbursed for services rendered under ARTICLE VI D., in accordance with the following:
  - 1. Purchasing: Acutal expenditures.
- 2. <u>Physical Plant Services</u>: At costs established for such services as would be charged to organizational units of the UNIVERSITY.
- 3. <u>Personnel and Payroll</u>: The amount of payments to individuals plus related payroll expenses.
- 4. <u>Indirect Costs</u>: For items 1 and 3 indirect costs shall be reimbursed at the rate of 10%.
- D. Minimum Indirect Cost Recovery by University: It is the intention of UNIVERSITY and ADOT that UNIVERSITY shall recover indirect costs as set forth herein. In no event shall the indirect costs be less than \$10,000 plus 10% of direct expenditures, or the indirect costs as determined by Article VII para. A., B., and C., whichever is greater. Payments to UNIVERSITY by ADOT for indirect costs shall be based on any one fiscal year expenditures or expenditures of a part of a fiscal year exceeding six (6) months commencing with the fiscal year beginning July 1, 1980.

E. <u>Invoices and Payments</u>: UNIVERSITY will submit invoices to ADOT on such forms as may be prescribed by ADOT not more frequently than quarterly for all amounts due UNIVERSITY hereinunder. Invoices shall be in such detail as necessary to reflect the basis for costs in relation to the applicable ARTICLE and paragraph of this Agreement. Payments shall be made to UNIVERSITY promptly upon receipt of invoice for all services called for hereinunder.

## ARTICLE VIII - AUTHORIZED REPRESENTATIVES:

- A. <u>Authorized Representative for ADOT</u>: The Director of the ATRC appointed by ADOT shall be authorized to take such actions as may be called for under the terms of this Agreement to be taken by the Authorized Representative of ADOT.
- B. <u>Authorized Representative for UNIVERSITY</u>: The Chairman, Department of Civil Engineering, of UNIVERSITY shall be authorized to take such actions as may be called for under the terms of this Agreement to be taken by the Authorized Representative of UNIVERSITY.

ARTICLE IX - CHANGES: No changes in the scope, complexity, methods, nature or character of this Agreement shall be made by either party until such time as the Agreement has been appropriately modified in writing and signed by the signatories authorized to sign contracts on behalf of the contracting parties. It shall be understood that this authority is not delegated to the Authorized Representatives designated in the preceding ARTICLE VIII herein.

ARTICLE X - EFFECTIVE PERIOD OF AGREEMENT: This Agreement shall become effective after execution of the parties and upon the date it is filed with the Secretary of State as stipulated in A.R.S. 11-952, and remain in effect until terminated by the parties as provided in ARTICLE XII herein, unless cancelled as provided for in ARTICLE XI herein.

ARTICLE XI - <u>CANCELLATION</u>: The parties understand that this Agreement is subject to cancellation by the Governor of Arizona pursuant to A.R.S. 38-511 the provisions of which are incorporated herein.

ARTICLE XII - TERMINATION: This Agreement may be terminated by either party hereto by giving written notice to the other party ninety (90) days in advance of the date of termination except any ADOT employee enrolled in the University under this agreement shall be entitled to complete the class or classes in which he is enrolled. In case of termination University shall be reimbursed for all commitments made under the terms of this Agreement prior to such termination.

IN WITNESS WHEREOF the parties have signed this Agreement on the dates shown below:

ARIZONA DEPARTMENT OF TRANSPORTATION

BY: WA Charry

Name
and Title W. A. Ordway, Director

Date: September 12, 1979

ARIZONA BOARD OF REGENTS ACTING FOR ARIZONA STATE UNIVERSITY

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BY:

Name Jack G. Penick and Title <u>Vice President for Business</u> Affairs

Date: 9/13/79

# ARIZONA TRANSPORTATION RESEARCH CENTER

